

### ABSTRACT

Methods for delivering drugs, vectors, cells diagnostic agents and other chemical or biological entities to a tissue or cellular surface are disclosed.

The methods generally involve coupling a molecule to the tissue or cellular surface.

- 5 The molecule comprises at least one reactive group that reacts with groups present on the surface, and at least one signaling molecule. A chemical or biological entity having a recognition molecule attached thereto or expressed thereby is introduced to the surface. The recognition molecule and signaling molecule bind so as to attach the entity to the surface. Localized delivery of various chemical and biological
- 10 entities is thereby achieved. The molecule can also contain a polymer that can mask adhesive information inherent to the tissue or cellular surface. Tissues and cells modified according to the present methods are also disclosed.